

LEGEND

- EXISTING PAVEMENT
- EXISTING BUILDINGS
- EXISTING STORM SEWER
- PROPOSED UNDERDRAIN
- EXISTING INLET

DRAINAGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
ASR70541	POROUS BACKFILL NO. 1	C.Y.	443
AS705524	4" PERFORATED UNDERDRAIN W/SOCK	L.F.	9,850
AS705530	10" PERFORATED UNDERDRAIN W/SOCK	L.F.	1,626

705-UNDERDRAIN NOTES:

THE PROPOSED UNDERDRAIN PIPE WILL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 705 "PIPE UNDERDRAINS FOR AIRPORTS" AS STATED ON PAGE 109 OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JULY 1, 2004.

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING 4" & 10" P.E. TUBING (WRAPPED) AT THE LOCATIONS AND TO THE GRADES SHOWN ON THE CONSTRUCTION PLANS.

705-3.3 LAYING AND INSTALLING PIPE. REVISE THIS SECTION AS FOLLOWS:

"PIPE DRAINS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE PIPE SHALL BE BEDDED IN THE UNDERLYING MATERIAL TO A DEPTH NOT LESS THAN 10 PERCENT OF THE EXTERNAL DIAMETER OF THE PIPE, AND WHERE TRENCHING IS REQUIRED, THE TRENCH SHALL HAVE A WIDTH OF NOT LESS 12 IN. THE BOTTOM OF THE TRENCH SHALL BE COMPACTED IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.

JOINTS AND FITTINGS MAY BE ASSEMBLED WITHOUT GASKETS OR SOLVENT CEMENT IF THE JOINT IS SAND TIGHT AND THE SPIGOT ENTERS THE SOCKET NOT LESS THAN 1/3 OF THE SOCKET DEPTH FOR SOLVENT CEMENT JOINTS AND FULL-DEPTH FOR ELASTOMERIC GASKET JOINTS.

NO PIPE SHALL BE PLACED IN THE TRENCH UNTIL IT AND THE PREPARED FOUNDATION HAVE BEEN APPROVED BY THE RESIDENT ENGINEER. THE PIPE SHALL BE LAID SO THAT THE FLOWLINE WILL BE AT THE GRADE SHOWN ON THE PLANS OR ESTABLISHED BY THE RESIDENT ENGINEER. THE PERMISSIBLE MINIMUM COVER OVER A PIPE SHALL BE 6 IN.

LAYING OF PIPES SHALL COMMENCE AT THE OUTLET END AND PROCEED TOWARD THE INLET END WITH THE PIPES TRUE TO LINE AND GRADE.

THE ENDS OF THE PIPE SHALL BE CAREFULLY CLEANED BEFORE THEY ARE PLACED, AND SHALL BE PLACED TO AVOID UNNECESSARY HANDLING ON THE FOUNDATION. AS EACH LENGTH OF PIPE IS LAID, THE ENDS OF THE PIPE SHALL BE PROTECTED TO PREVENT THE ENTRANCE OF ANY MATERIAL.

LONGITUDINAL LAPS SHALL BE PLACED AT THE SIDES AND SEPARATE SECTIONS OF PIPE SHALL BE JOINED WITH TIGHTLY-DRAWN, APPROVED CONNECTING BANDS.

THE TRENCH SHALL BE BACKFILLED WITH SELECT MATERIAL, MEETING THE APPROVAL OF THE ENGINEER, PLACED IN 8 IN. LAYERS, LOOSE MEASUREMENT, AND COMPACTED TO THE ENGINEER'S SATISFACTION. THE PIPE UNDER PROPOSED PAVEMENT, PLUS 10 FT ON EITHER SIDE, WILL BE BACKFILLED WITH POROUS BACKFILL TO THE ORIGINAL GROUND ELEVATIONS OR TO THE SUBGRADE ELEVATION IF THE FILL HAS BEEN CONSTRUCTED PRIOR TO THE INSTALLATION."

705-3.6 BACKFILLING; ADD THE FOLLOWING TO THIS SECTION:

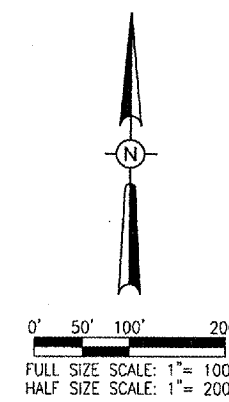
"THE EDGE DRAIN TRENCH WILL BE BACKFILLED WITH POROUS BACKFILL NO. 1 IN ACCORDANCE WITH THE DETAIL ON THE CONSTRUCTION PLANS. THE POROUS BACKFILL WILL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATION SET FORTH FOR GRANULAR MATERIAL BACKFILL."

POROUS BACKFILL NO. 1 MATERIAL SHALL CONFORM TO THE REQUIREMENTS FOR IDOT CA-14 OR CA-16.

ALL EXCESS EARTH MATERIAL LEFT AFTER THE UNDERDRAIN PIPES HAVE BEEN COMPLETELY BACKFILLED WILL BE DISPOSED OF ON THE AIRPORT AT LOCATIONS DESIGNATED BY THE AIRPORT MANAGER. DISPOSAL OF THE MATERIAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE UNDERDRAIN PIPE INSTALLATION AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.

THE 10" P.E. TUBING WILL BE INSTALLED 2' FROM THE EXISTING 6" P.E. TUBING. THE CONTRACTOR WILL HAND DIG THE CONNECTION INTO THE EXISTING INLETS TO AVOID DAMAGE TO THE EXISTING 6" P.E. TUBING. THE CONTRACTOR MAY HAVE TO MOVE THE EXISTING 6" P.E. TUBING CONNECTION IN THE EXISTING INLETS TO MAKE ROOM FOR THE PROPOSED 10" P.E. TUBING. THIS WILL BE DONE AS AN INCIDENTAL ITEM TO THE INSTALLATION OF THE THE 10" P.E. TUBING AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

**NOTE:**  
THERE IS AN EXISTING 6" P.E. TUBING IN CLOSE PROXIMITY TO THE PROPOSED 10" P.E. TUBING. THE PROPOSED 10" P.E. TUBING WILL BE INSTALLED 2' TO THE DEVELOPMENT SIDE OF THE EXISTING 6" P.E. TUBING. THE CONTRACTOR WILL USE EXTREME CARE NOT TO DAMAGE THIS PIPE. ANY DAMAGE TO THIS PIPE WILL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.



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DATE	REVISION	BY
12/22/06	REVISED AS PER IDA REVIEW	CAH

LOGAN COUNTY AIRPORT  
LINCOLN, ILLINOIS  
A.I.P. PROJ.: 3-17-0062-813  
IL PROJ.: AAA-3545

DATE	BY	REVIEWED
08/21/06	CCC	CCC
09/11/06	CCC	CCC
10/31/06	CAH	CAH

Hanson Professional Services, Inc.  
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Springfield, Illinois 62703-2886  
Offices Nationwide

DRAINAGE IMPROVEMENTS  
PROPOSED DRAINAGE PLAN